

WHAT IS CLAIMED IS:

1. A toothbrush comprising:
a body which comprises a handle region, a head region and a neck region, which is located between the handle region and the head region; and
functional components which are arranged, at least in part, within the body and comprise an electrically operated functional unit and an electrical supply device for the functional unit, the electrical supply device having a rechargeable energy store and at least one contact element, and it being possible, via the at least one contact element, to produce an electrically conductive connection between the energy store and a power supply unit which, when in use, is located outside the body,
wherein the energy store is arranged in an inner space of the body, the inner space being sealed by a primary sealing element in order to prevent the energy store from coming into contact with splash water and other foreign matter.
2. The toothbrush as claimed in claim 1, wherein the inner space is permanently closed by the primary sealing element and the at least one contact element is arranged outside the inner space.
3. The toothbrush as claimed in claim 2, further comprising a secondary sealing element by means of which the contact element is sealed during use, in order to prevent the contact element from coming into contact with splash water, and which can be moved, at least in part, in order to render the contact element accessible from the outside at least for a charging operation.
4. The toothbrush as claimed in claim 3, wherein the secondary sealing element can be displaced, pivoted, removed or pierced.
5. The toothbrush as claimed in claim 1, wherein the energy store and the at least one contact element are arranged within the inner space, the inner space being closable and openable at least to the extent where the at least one contact element is accessible from the outside at least for the charging operation.
6. The toothbrush as claimed in claim 5, wherein the body comprises a first housing part and a second housing part, the handle region being formed by the first and/or second housing part, the first and second housing parts being movable relative to one another between an open position and a closed position.
7. The toothbrush as claimed in claim 6, wherein the second housing part is designed as a closure that closes off the inner space.

8. The toothbrush as claimed in claim 6, wherein one of the first and/or second housing part is displaceable along a longitudinal axis of the body.

9. The toothbrush as claimed in claim 6, wherein the contact element is arranged in the inner space such that, in the closed position, the inner space is sealed at least against splash water and, in the open position, at least the contact element is accessible from the outside.

10. The toothbrush as claimed in claim 6, wherein the first and second housing parts are screwed to one another, use preferably being made of a thread with a distance-limiting means.

11. The toothbrush as claimed in claim 6, wherein a switch interacts with the second housing part, to deactivate the functional unit in the open position.

12. The toothbrush as claimed in claim 11, wherein the switch comprises the contact element and a part which can be moved relative thereto, the part, in the closed position being connected in an electrically conductive manner to the contact element.

13. The toothbrush as claimed in claim 5, wherein the contact element has a pin which is connected directly in an electrically conductive manner to a terminal of the energy store.

14. The toothbrush as claimed in claim 2, wherein the at least one contact element is arranged within a cutout in the brush body, with the result that it is offset inward relative to the outer surface of the brush body.

15. The toothbrush as claimed in claim 14, wherein the cutout is oriented away from the dead region.

16. The toothbrush as claimed in claim 14, wherein the shape of the cutout is adapted to the shape of a further contact element of a power supply unit for the energy store.

17. A process for producing a toothbrush as claimed in claim 1, which comprises:
producing the body by injection molding from at least one hard component which serves as reinforcement;

inserting the functional unit into or onto the body; and

integrally molding a soft component such that the functional unit is directly encapsulated, at least in part, by the soft component.

18. The process as claimed in claim 17, wherein the electrical supply device is inserted into the inner space once the soft component has been produced, the inner space then being sealed by the primary sealing element formed from a soft and/or hard component.

19. The process as claimed in claim 17, wherein the electrical supply device is inserted into the inner space before the soft component has been produced, and in that the soft component is then integrally molded such that the contact element is embedded, at least in part, in the soft component, and the inner space is sealed by a primary sealing element formed from the soft component.

20. The process as claimed in claim 17, wherein all soft-component structures of the soft component are formed in one operation.

21. The process as claimed in claim 20, wherein soft-component structures include cleaning elements, damping elements in the neck region and/or in the inner space, soft/resilient structures on the body, and sealing elements.

22. A saleable product comprising a toothbrush as claimed in claim 1 and a power supply unit having a contact element, the toothbrush and the power supply unit being arranged in a pack such that at least one of the contact elements of the power supply unit or of the toothbrush is visible from the outside.